What is claimed is:

1. A needle guard mechanism for sewing machines to stabilize needles during lowering for stitching operation to prevent wobbling caused by high speed motion, comprising:

a needle guard including a movable member, a rear needle guard fastening to a top section of said movable member and a front needle guard straddling the top section of said movable member and swingable reciprocally; and

a transmission mechanism including an main axle, a direction switch mechanism and a linkage mechanism, said main axle providing a rotational force and being coupled with said direction switch mechanism, said direction switch mechanism transforming the rotational force to a reciprocal movement normal to said main axle, said linkage mechanism transferring the force to said needle guard.

2. The needle guard mechanism of claim 1, wherein said direction switch mechanism includes an cam, a bearing and an oscillation member, said cam having one end coupled with said bearing and said oscillation member to drive said oscillation member to move reciprocally for moving said needle guard through said linkage mechanism.

3. The needle guard mechanism of claim 1, wherein said linkage mechanism includes at least one oscillation element and one shaft that are coupled with each other to drive said needle guard to move.

4. The needle guard mechanism of claim 1, wherein said linkage mechanism includes a first oscillation element, a second oscillation element, a first shaft, a second shaft and three coupling sleeves that are inter-coupled with one another, said first oscillation element being coupled with said transmission mechanism, said second shaft being coupled with said needle guard.

5. The needle guard mechanism of claim 4, wherein said second oscillation element is coupled with said second shaft through a first connection member such that said second oscillation element and said second shaft are swingable relative to each other.

6. The needle guard mechanism of claim 5, wherein said first connection member has a first latch section on a lateral side thereof.

7. The needle guard mechanism of claim 5, wherein said second shaft has one end forming a first straddle section to couple with said first connection member.

8. The needle guard mechanism of claim 1, wherein said movable member of said needle guard is coupled with said front needle guard through a coupling member.

9. The needle guard mechanism of claim 8, wherein said movable member of said needle guard is coupled with said coupling member through a second connection member such that said movable member and said coupling member are

swingable relative to each other.

10. The needle guard mechanism of claim 9, wherein said second connection member has a second latch section on a lateral side thereof.

11. The needle guard mechanism of claim 10, wherein said coupling member has a second straddle section on one end which couples with said movable member of said needle guard so that said second straddle section is coupled with said second latch section to couple said movable member with said coupling member.